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te of Signature and Deposit: October 5, 2004

Carl R Schwartz Reg. No. 29,437

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Christopher M. Dobson

Serial No.:

09/787,560

Filed:

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Examiner:

Christopher J. Nichols

Art Unit:

1647

Commissioner For Patents

P.O. Box 1450

Alexandria, VA 22313-1450 Attn: Mail Stop Amendment

Dear Sir:

Amendment

In response to the Office Action mailed April 5, 2004 in the above described case, Applicant hereby submits the following amendment and remarks:

- 1. Pages 2-4 of this document contain the claims as amended hereby.
- 2. Pages 5-11 contain remarks describing the nature of the amendment and why Applicant believes that the amendment overcomes the pending rejections.

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Please amend the claims so that the set of claims is summarized as follows:

- 1-37 (canceled)
- --38. (currently amended) A process for preparing an amyloid fibril, which process comprises:
- a first step of preparing a solution comprising a protein, said solution being in a state so that nucleation and fibril growth of a non-naturally occurring fibril can will occur, and
- <u>a second step of</u> allowing nucleation and <u>fibril</u> growth <u>of</u> the non-naturally <u>occurring fibril</u> to take place;

wherein a non-naturally occurring amyloid fibril is prepared by said process.

- 39. (original) A process according to claim 38 wherein the solution further comprises an alcohol.
- 40. (original) A process according to claim 38 wherein the solution further comprises alcohol selected from methanol, ethanol, propanol, butanol, trifluoroethanol and hexafluoroisopropanol.
- 41. (original) A process according to claim 38 wherein the solution further comprises acetonitrile.
- 42. (original) A process according to claim 38 wherein the solution further comprises urea.
- 43. (original) A process according to claim 38 wherein the concentration of protein in the solution is from 0.1 mM to 10 mM.
- 44. (original) A process according to claim 38 wherein the temperature of the solution is from 0°C to 100°C.
- 45. (original) A process according to claim 38 wherein the solution is acidic.
- 46. (original) A process according to claim 38 wherein the pH of the solution is from 0.5 to 6.5.

- 47. (original) A process according to claim 38 wherein the solution is seeded with previously formed particles of protein.
 - 48. (canceled)
- 49. (original) A process according to claim 38 wherein the non-naturally occurring amyloid fibril prepared by said process comprises a metal.
- 50. (original) A process according to claim 49 wherein the metal is selected from the group consisting of copper, silver and gold.
 - 51-53 (canceled)
- 54. (previously presented) A process according to claim 38, wherein said solution is treated to denature or partially denature the protein.
- 55. (previously presented) A process according to claim 54, wherein said denaturing is effected by treatment with an alcohol, aliphatic nitrile or urea, reducing the pH, or by shaking, agitation or exposure to a glass or plastic surface.
- 56. (previously presented) A process according to claim 38, wherein the solution further comprises an alcohol at 5 to 40% v/v.
- 57. (previously presented) A process according to claim 38, wherein the solution further comprises an aliphatic nitrile at 5 to 95% v/v.
- 58. (previously presented) A process according to claim 38, wherein the solution further comprises urea at 4 to 7 M.
- 59. (previously presented) A process according to claim 38, wherein nucleation is achieved by varying the pH and/or ionic strength of the solution.
- 60. (previously presented) A process for preparing an amyloid fibril, which process comprises:

preparing a solution comprising a protein, said solution being in a state so that nucleation and fibril growth will occur, wherein the pH of the solution is from 0.5 to 6.5, the

temperature of the solution is from 0°C to 100°C, and wherein the solution optionally also comprises an additive selected from the group consisting of an alcohol at 5 to 40% v/v, an aliphatic nitrile at 5 to 95% v/v and urea at 4 to 7 M; and allowing nucleation and fibril growth to take place;

wherein a non-naturally occurring amyloid fibril is prepared by said process.